Title (en)

METHOD AND APPARATUS FOR IMPROVING BEAM FINDING IN A WIRELESS COMMUNICATION SYSTEM

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERBESSERUNG DER STRAHLFINDUNG IN EINEM DRAHTLOSKOMMUNIKATIONSSYSTEM

Title (fr)

PROCÉDÉ ET APPAREIL POUR AMÉLIORER LE TEMPS DE DÉTECTION DE FAISCEAU DANS UN SYSTÈME DE COMMUNICATIONS SANS FIL

Publication

EP 3048852 A2 20160727 (EN)

Application

EP 16152576 A 20160125

Priority

- US 201562107937 P 20150126
- US 201562107945 P 20150126

Abstract (en)

The present invention is directed to methods and apparatus to determine whether a beam set of a UE is complete or a beam finding procedure is finished. According to the invention, at least one extra transmission is made by the UE after the first success of preamble, and eNB can determine whether a beam set of a UE is complete or a beam finding procedure is finished based on the at least one extra transmission. The eNB can make this decision, according to the first aspect of the invention, based on a predetermined ruling when several extra transmissions are made, in particular when these are made with the same transmission power. Alternatively or additionally, the eNB can make this decision, according to the second aspect of the invention, based on a change of the transmission power level, which corresponds to the reception power level, when one or several extra transmissions are made.

IPC 8 full level

H04W 74/08 (2009.01); H04W 74/00 (2009.01)

CPC (source: CN EP US)

H04W 24/02 (2013.01 - US); **H04W 48/16** (2013.01 - CN); **H04W 52/04** (2013.01 - US); **H04W 72/046** (2013.01 - US); **H04W 72/0473** (2013.01 - US); **H04W 74/08** (2013.01 - CN); **H04W 74/0833** (2013.01 - EP US); H04W 74/006 (2013.01 - EP US); H04W 88/02 (2013.01 - US); H04W 88/08 (2013.01 - US)

Citation (applicant)

- US 2010165914 A1 20100701 - CHO DONG-HO [KR], et al
- US 7184492 B2 20070227 - DENT PAUL W [US]
- DOCOMO 5G WHITE PAPER, Retrieved from the Internet <URL:hftps://www.nttdocomo.co.jp/english/binary/pdf/corporate/technology/whitepaper-5g/DOCOMO_5G_White_Paper.pdf>
- "Introduction of Dual Connectivity", 3GPP R2-145410
- "E-UTRA MAC protocol specification", 3GPP TS 36.321 V12.3.0
- "Physical layer procedures", 3GPPTS 36.213 V12.3.0

Cited by

EP3883287A4

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3048852 A2 20160727; **EP 3048852 A3 20161123**; **EP 3048852 B1 20180404**; CN 105828416 A 20160803; JP 2016140068 A 20160804; KR 20160137890 A 20161201; TW 201628429 A 20160801; US 11006421 B2 20210511; US 2016219571 A1 20160728; US 2021250933 A1 20210812

DOCDB simple family (application)

EP 16152576 A 20160125; CN 201610047906 A 20160125; JP 2016011408 A 20160125; KR 20160008572 A 20160125; TW 105102148 A 20160125; US 201615005540 A 20160125; US 202117225587 A 20210408